July 30, 2013

By certified mail, return receipt requested

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Air and Radiation Division
EPA Region 5
77 West Jackson Blvd. (AE-17J)
Chicago, IL 60604
Attn: Compliance Tracker

FedEx Tracking No. 8025 3400 9265

Office of Regional Counsel
EPA Region 5
77 West Jackson Blvd. (C-14J)
Chicago, IL 60604

RE: United States v. SABIC Innovative Plastics US LLC et al., No. 3:12-cv-76
Burkville, Alabama Plant
Annual ELP Compliance Status Report (Reporting Period: Dec. 5, 2012 – June 30, 2013)

Pursuant to Paragraph 65 of the Consent Decree in the above-referenced matter, enclosed is the first annual ELP Compliance Status Report for the SABIC Innovative Plastics US LLC Burkville plant. This report must be submitted within 31 days after the first full half-year after the Effective Date of this Consent Decree (which was December 5, 2012), which makes July 31, 2013 the deadline to submit this report. Therefore, this submission is timely.

If you have any questions regarding this report, please contact Cammie Ashmore via email at cammie.ashmore@sabic-ip.com or via phone at (334) 832-5286.

Certification:

I certify under penalty of law that I have examined and am familiar with the information submitted in this document and all attachments and that this document and its attachments were prepared either by me personally or under my direction or supervision in a manner designed to ensure that qualified and knowledgeable personnel properly gather and present the information contained therein. I further certify, based on my personal knowledge or on my inquiry of those individuals immediately responsible for obtaining the information, that the information is true, accurate, and complete.

John A. Curvey, Site General Manager

cc (by email): Loukeris.constantinos@epa.gov
Daugavietis.andre@epa.gov

LDAR personnel

The number of LDAR Personnel assigned to LDAR functions at each Covered Process Unit, excluding Personnel whose functions involve the non-monitoring aspects of repairing leaks, and the approximate percentage of time each such person dedicated to performing his/her LDAR functions.

There are five main LDAR Personnel (SABIC and the LDAR contractor) at the Burkville site with responsibilities to achieve compliance with applicable LDAR/ELP requirements. These main personnel consist of the following:

- 1 - SABIC Environmental Engineer who supports LDAR and spends 15-25% of time on LDAR
- 1 - SABIC LDAR Coordinator who works with Contractor LDAR Supervisor on a day-to-day basis and spends 60-75% of time on LDAR
- 1 - Contractor LDAR Supervisor who works with SABIC LDAR Coordinator on a day-to-day basis and spends 100% of time on LDAR
- 2 - Contractor LDAR Monitoring Technicians who each perform Method 21 and spend 100% of time on LDAR

Non-compliances with the requirements of Section V of the Consent Decree

An identification and description of any non-compliance with the requirements of Section V (Compliance Requirements).

During the reporting period, there have been several non-compliances with the increased monitoring frequency requirement involving valves and connectors.

There were nine valves that missed some monitoring - six valves that missed one quarter (1Q2013) and three valves that missed two quarters (1Q2013 and 2Q2013). Three of the group of six valves that missed one quarter were found during the April/May 2013 sitewide outage. These three valves were check valves, and were found under insulation; they were previously believed to be inaccessible connectors (flanges). These valves were promptly added to the LDAR database and monitored. None of the check valves was leaking when monitored.

The other six valves were missed during the 2011 LDAR reinventory project, during which all process lines were evaluated for LDAR regulatory applicability and updated field identification (new tags). This project involved an experienced LDAR contractor re-evaluating P&IDs for regulatory applicability (what is in/out of the LDAR program). Another LDAR contractor reinventoried covered components (updated the field tags) in a three-phase process: flagging, tagging, and documentation. Each phase included a QA/QC process.

The first phase, flagging, is where the drawings (P&IDs) were taken into the field and highly visible, eye-catching 'flags' (i.e., neon-colored nylon ribbon) were attached to process lines where the following were identifed:

- Light liquid (LL) process lines - neon pink
- Gas vapor (G/V) process lines - neon green

- Heavy liquid (HL) process lines - neon blue
- Vacuum service process lines – red
- DTM valves – white
- End of LDAR service (i.e., at block valve) – neon orange

Also, attached to the flagging ribbon was a card (tag) that identified the line number (from P&ID), P&ID number, service type, and notes (as needed for clarification for the next phase). The QA/QC for this phase involved a field check (someone went behind the 'flagger' to verify accuracy).

The second phase, tagging, is where the person went through the plant and physically hung tags in the field based on flagging. The QA/QC for this phase involved a field check (someone went behind 'tagger' to verify accuracy).

The third phase, documentation, is where the information in the field was input into a handheld device and then uploaded into the LDAR database. The QA/QC for this phase involved reviewing gaps in tag numbers (missing tag numbers in a row) hard copy. Then, for those gaps identified, someone was sent in the field to account for the gaps.

Even with all of the QA/QC, there were six valves that were missed during this process. These six valves were discovered during 1H2013 and promptly added to the LDAR database and monitored. None of the valves was leaking when monitored.

In addition, there are 54 connectors that missed one semi-annual monitoring period (10/1/12 – 3/31/13). Of these, 53 connectors were missed during the 2011 reinventory project, as described in detail above. One connector previously was thought to be part of an instrumentation system, but it did not meet the instrumentation system size requirement. Therefore, it was changed to a connector. These connectors were promptly added to the LDAR database and monitored. None of the connectors was leaking when monitored.

As part of ensuring that no additional monitoring is missed, SABIC is going to develop and implement an approach to assess completeness of the LDAR database.

Problems in complying with the requirements of Section V of the Consent Decree

An identification of any problems encountered in complying with the requirements of Section V (Compliance Requirements).

No problems have been identified to date in complying with the applicable requirements of Section V.

Paragraph 40 of Subsection V.G.

The information required by Paragraph 40 of Subsection V.G.

Paragraph 40 of Subsection V.G. is not applicable to the Burkville site.

Training

A description of the trainings conducted in accordance with this Consent Decree.

The SABIC LDAR Coordinator at the Burkville site conducted in-person LDAR training by May 31, 2013 for those individuals identified as having LDAR duties/responsibilities at the Covered Process Units (for Burkville, they are the Phosgene/Resin Units). Those identified as having LDAR duties/responsibilities were grouped as follows: Phosgene/Resin Plant Operators; Phosgene/Resin Plant Maintenance (SABIC and resident maintenance contractors); Phosgene/Resin Engineering (Quad members and other day personnel); and the LDAR contractor. The LDAR training was customized for each group based on the scope of their duties. Refresher training will be provided annually (next training will be conducted by May 31, 2014).

The training included the following topics:

- What is the LDAR Program?
- Why do we have an LDAR Program?
- How do we comply with LDAR requirements?
- Who has responsibilities in the LDAR Program?
- What are these responsibilities?
- Key areas of concern (i.e., tag retention, open-ended valves or lines, sensory inspections, 5-day first attempt at repair, 15-day final repair, delay of repair, MOC)

Deviations identified in the QA/QC and corrective actions

Any deviations identified in the QA/QC performed under Subsection V.J, as well as any corrective actions taken under that Subsection.

No deviations have been identified as part of the QA/QC performed under Subsection V.J.

Summary of LDAR audit results

A summary of LDAR audit results including specifically identifying all alleged deficiencies.

The LDAR audit was conducted by Trihydro Corporation on October 8, 2012 through October 11, 2012, and a close-out meeting was conducted on October 12, 2012. The audit was

conducted on the following elements pursuant to the requirements of Paragraph 47 of the Consent Decree:

- Review of compliance with applicable LDAR regulations, including LDAR requirements related to valves, connectors, pumps, and agitators in heavy liquid service
- Verification that equipment is monitored at the appropriate frequencies as required by applicable LDAR regulations
- Verification of documentation and sign-offs have been recorded for components placed on delay of repair (DOR)
- Verification that repairs were performed within the periods required by applicable LDAR regulations
- Review of monitoring data and equipment counts (e.g., number of pieces of equipment monitored per day) for feasibility and unusual trends
- Verification that proper calibration records and monitoring instrument maintenance information are maintained
- Verification that LDAR program records are maintained as required by applicable LDAR regulations
- Field observation of LDAR monitoring personnel that conduct leak detection monitoring
- Review and verification that applicable pieces of equipment are included in the LDAR program
- Comparative monitoring

As a result of the LDAR audit, three deficiencies were identified:

- **Deficiency 1:** The unsafe-to-monitor plan indicates that at no time is it safe to monitor components located in the enclosures in the Resin and Phosgene Units. While the control system for the enclosures (they are vented to a caustic scrubber) appears to meet the requirements of section 63.1016(a) of Subpart TT for the components in phosgene service, it is unclear whether the system meets the Subpart TT requirements for TEA or for section 63.179 of Subpart H for controls for the components in $MeCl_2$ service. As access is allowed for some individuals into the enclosures, there is a discrepancy related to whether or not these components can be monitored.

- **Deficiency 2:** The initial repair attempts for two components (valve 106062, discovered leaking on April 10, 2012; and pump 106100, discovered leaking on June 21, 2011) were not completed within the five-day time limit.

- **Deficiency 3:** The 37 components listed in Attachment 1 (of the Trihydro Third-Party Audit Report) were identified as having missed monitoring events between the date of the last monitoring before the missed monitoring event and the date of the first monitoring event after the miss. These components had missed monitoring events because their associated process line was missed during the initial equipment applicability determination review.

The results of the comparative monitoring showed that no component type had a leak ratio of 3.0 or higher. In fact, in every instance, the auditors observed a lower leak rate than that observed by SABIC during the time periods reviewed (i.e., the Comparative Monitoring Leak Ratio was less than 1.0). Thus, there were no corrective actions identified arising out of the comparative monitoring conducted during the audit.

Status of all actions under the submitted CAP

The status of all actions under any CAP that was submitted during the reporting period, unless the CAP was submitted less than one month before the compliance status report.

All corrective actions identified had been completed by the time the Final Corrective Action Plan was submitted on May 31, 2013 (due June 5, 2013) and were addressed as outlined below:

- **Corrective Action 1:** There are no components in TEA service located inside an enclosure. However, there are some lines to the reactor inside the enclosures that formerly contained TEA, but these lines have been abandoned in place and are out of service. It is believed that this change (no TEA lines in service in the enclosures) occurred around 2003. The TEA lines now route to the formulation area outside of the enclosures and are being monitored. There are components in methylene chloride service inside the enclosures. However, they are deemed unsafe-to-monitor (UTM). A detailed explanation of the reasons the components are UTM was provided in the Final Corrective Action Plan submitted to EPA.

  Corrective Action 2: SABIC was aware of both deficiencies prior to the audit. Component 106100, a pump in light liquid service, was discovered leaking visually on June 21, 2011. A first repair attempt is required to be performed within five days after discovery of a leak. However, the initial repair attempt, which successfully stopped the leak, was performed three days late (on June 29, 2011), most likely due to insufficient communication between the LDAR contractor and Operations. Component 106062, a control valve in gas/vapor service, was discovered leaking by instrument monitoring on April 10, 2012 and a work order to repair the valve was entered by the LDAR contractor. On April 12, 2012, operations personnel made a repair attempt on the valve and contacted the LDAR contractor to request re-monitoring of the valve to see if the repair attempt was successful. However, the wrong work order was referenced in the request for re-monitoring. This subsequently led to a miscommunication between the on-site LDAR contractor (monitoring technician) and Operations regarding the re-monitoring.

The re-monitoring of the control valve to validate the repair attempt was due by April 15, 2012; however, the valve was not re-monitored until April 16, 2012, one day late. The monitoring did confirm that the April 12th repair attempt was successful, so the leak was actually repaired within two days of its discovery. Thus, no excess emissions occurred as a result of the re-monitoring occurring one day late.

A number of program improvements have been implemented since these two events, including adding two full-time LDAR technicians as well as an LDAR Coordinator to the team. The LDAR Coordinator and/or the LDAR Contractor reviews the LDAR database on a daily basis during the work week (Monday to Friday) to help track due dates relative to the 5-day and 15-day regulatory deadlines. The monitoring technicians have been reminded of the requirement to conduct follow-up monitoring in a timely manner. Further, an updated point of contact list was provided to the contract monitoring technicians so they are aware of the appropriate operations personnel to contact to confirm that repaired components are ready for re-monitoring.

- **Corrective Action 3:** Of the 37 components, only 5 components (1 pump and 4 connectors) actually had missed monitoring events (see bold rows in Attachment 1 of the Final Corrective Action Plan). SABIC was aware of these deficiencies prior to the audit. These missed monitoring events occurred around 2 years ago when the site failed to include certain process lines when it re-tagged the equipment in the Resin plant. Once SABIC identified this miss in late September 2012, Operations undertook a rapid, focused effort to re-review all Resin Plant Process & Instrumentation Diagrams (P&IDs) prior to the end of the third quarter of 2012 to minimize missed monitoring events due by the end of that quarter.